

Stevens County

Estimated Economic Impact of Agriculture, Food, and Food Processing Sectors

6/14/2018

Using the most recent IMPLAN data available (2016) adjusted for 2018, 15 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the Stevens County economy.¹

These 15 sectors have a total direct output of approximately **\$201.0 million** and support **443 jobs** in Stevens County. Running the model for all 15 sectors simultaneously produces the following results:

Agriculture, Food, and Food Processing Sector Contribution to Overall Stevens County Economy						
Impact Type ²	Employment	% Employment	Total Value Added ³	Total Value Added % of Gross Regional Product ⁴	Output ⁵	Output % of Gross Regional Product
Direct Effect	443.1	13.42%	\$39,263,414	18.55%	\$200,992,282	94.96%
Indirect Effect	712.4	21.58%	\$33,604,134	15.88%	\$54,116,415	25.57%
Induced Effect	110.0	3.33%	\$8,630,079	4.08%	\$15,385,978	7.27%
Total Effect	1265.5	38.34%	\$81,497,627	38.51%	\$270,494,674	127.80%

As shown in the above table, agriculture, food, and food processing sectors support **1,266 jobs**, or **38.34%** of the entire workforce in the county. These sectors provide a total economic contribution of approximately **\$270.5 million**, roughly **127.80% of the economy**.

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of GRP. Total value added by the 15 agriculture, food, and food processing sectors is approximately **\$81.5 million**, or **38.51% of the GRP**. This indicates that personal income, business income, and taxes generated by these sectors account for **38.51% of the total economy**.

The following tables document the top industries affected by employment and output, as well as a listing of all industries that were analyzed.

¹ Article on building a contribution analysis in IMPLAN that avoids double counting:

http://www.implan.com/index.php?option=com_content&view=article&id=660%3A660&catid=253%3AKB33&Itemid=70

² Direct, indirect, and induced effects sum together to estimate the total economic contribution in the state. **Direct effects** capture the contribution from agricultural and food products. **Indirect effects** capture the economic benefit from farms and agricultural businesses purchasing inputs from supporting industries within the state. **Induced effects** capture the benefits created when employees of farms, agricultural businesses, and the supporting industries spend their wages on goods and services within the state.

³ Value added = labor income + indirect business taxes + other property type income.

⁴ GRP = final demand of households + governments expenditures + capital + exports - imports - institutional sales.

⁵ Output = intermediate inputs + value added.

In the top ten agriculture, food, and food processing sectors by employment, the support activities for agriculture and forestry sector is the top employer with **516 employees**. This table also shows the amount of jobs that are created by the agriculture industry in Stevens County.

Top Ten Agriculture, Food, and Food Processing Sectors by Employment		
Sector	Total Employment	Total Output
Support activities for agriculture and forestry	515.8	\$26,681,872
Grain farming	160.9	\$122,263,949
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	160.8	\$43,128,382
Real estate	44.4	\$3,245,086
Wholesale trade	40.5	\$8,376,663
Vegetable and melon farming	36.9	\$6,661,797
Animal production, except cattle and poultry and eggs	31.6	\$6,733,237
Truck transportation	28.4	\$4,522,873
Limited-service restaurants	18.4	\$1,438,830
Maintenance and repair construction of nonresidential structures	18.1	\$2,471,294

The grain farming sector directly contributes approximately **\$122.3 million** to the Stevens County economy. The table below also shows the amount of revenue that is generated in other industries by having a strong agriculture industry.

Top Ten Agriculture, Food, and Food Processing Sectors by Output		
Sector	Total Employment	Total Output
Grain farming	160.9	\$122,263,949
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	160.8	\$43,128,382
Support activities for agriculture and forestry	515.8	\$26,681,872
Wholesale trade	40.5	\$8,376,663
Oilseed farming	3.6	\$7,271,299
Animal production, except cattle and poultry and eggs	31.6	\$6,733,237
Vegetable and melon farming	36.9	\$6,661,797
Fluid milk manufacturing	8.0	\$5,762,408
Owner-occupied dwellings	0.0	\$5,041,721
Truck transportation	28.4	\$4,522,873

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture, food, and food processing sector and the output they contributed to the Stevens County economy.

All Agriculture, Food, and Food Processing Sectors		
Sector	Total Employment	Total Output
Oilseed farming	3.6	\$7,271,298.53
Grain farming	160.9	\$122,263,948.57
Vegetable and melon farming	36.9	\$6,661,797.16
Fruit farming	0.3	\$23,296.12
Tree nut farming	0.0	\$21.74
Greenhouse, nursery, and floriculture production	3.1	\$354,963.25
Cotton farming	15.7	\$3,740,023.68
All other crop farming	11.3	\$1,714,825.42
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	160.8	\$43,128,381.82
Dairy cattle and milk production	7.3	\$2,760,722.29
Poultry and egg production	0.2	\$202,674.64
Animal production, except cattle and poultry and eggs	31.6	\$6,733,236.62
Fluid milk manufacturing	8.0	\$5,762,408.02
Bread and bakery product, except frozen, manufacturing	1.3	\$162,906.44
Veterinary services	2.2	\$211,777.31

All 105 counties in Kansas have an IMPLAN model and an agriculture, food, and food processing contribution summary. These values do not factor in the retail environment of food sales. Food retail is important, but in order to provide the most accurate picture of what production agricultural and processing contributes to Stevens County, the retail sector was omitted.